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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,009	04/16/2002	Jesus F. Aparicio	246152015600	3833

7590

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EXAMINER

KERR, KATHLEEN M

ART UNIT

PAPER NUMBER

1652

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/018,009

Applicant(s)

APARICIO ET AL.

Examiner

Kathleen M. Kerr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-21 and 24-28 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Application Status*

1. By virtue of a preliminary amendment filed December 14, 2001, claims 22-23 have been cancelled and Claim 28 has been added. Thus, Claims 1-21 and 24-28, as filed originally or amended on December 14, 2001, are at issue in the instant Office action.

### *Restriction*

2. Restriction is required under 35 U.S.C. § 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 C.F.R. § 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-2, 6-15, 17, 24-26, drawn to polynucleotides related to SEQ ID NO:5, related products and methods.

Group II, claim(s) 1-2, 6-15, 17, 24-26, drawn to polynucleotides related to SEQ ID NO:7, related products and methods.

Group III, claim(s) 1-2, 6-15, 17, 24-26, drawn to polynucleotides related to SEQ ID NO:9, related products and methods.

Group IV, claim(s) 3-5, drawn to polypeptides related to SEQ ID NO:5.

Group V, claim(s) 3-5, drawn to polypeptides related to SEQ ID NO:7.

Group VI, claim(s) 3-5, drawn to polypeptides related to SEQ ID NO:9.

Group VII, claim(s) 16, drawn to methods of inactivating a polynucleotide related to SEQ ID NO:5 in a *Streptomyces* cell.

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Group VIII, claim(s) 16, drawn to methods of inactivating a polynucleotide related to SEQ ID NO:7 in a *Streptomyces* cell.

Group IX, claim(s) 16, drawn to methods of inactivating a polynucleotide related to SEQ ID NO:9 in a *Streptomyces* cell.

Group X, claim(s) 18-20, drawn to methods of making pimarinic acid or a biomolecule using a cell having a polynucleotide related to SEQ ID NO:5.

Group XI, claim(s) 18-20, drawn to methods of making pimarinic acid or a biomolecule using a cell having a polynucleotide related to SEQ ID NO:7.

Group XII, claim(s) 18-20, drawn to methods of making pimarinic acid or a biomolecule using a cell having a polynucleotide related to SEQ ID NO:9.

Group XIII, claim(s) 21 and 28, drawn to a biomolecules.

Group XIV, claim(s) 27, drawn to methods of oxidizing a methyl group using a polypeptide related to SEQ ID NO:5.

Group XV, claim(s) 27, drawn to methods of oxidizing a methyl group using a polypeptide related to SEQ ID NO:7.

Group XVI, claim(s) 27, drawn to methods of oxidizing a methyl group using a polypeptide related to SEQ ID NO:9.

3. The inventions listed as Groups I-XVI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group I has a technical feature related to the sequence identity limitations of Claim 1. Said limitations do not describe a genus of polynucleotides that are above the prior art; see in particular the fragment language of item (ii) which reads on virtually any polynucleotide sequence. Thus, the technical feature of Group I cannot be considered a special technical feature. Since Group I has no special technical feature, none can be shared with other Groups. Thus, the Groups have been grouped according to technical features as claimed.

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Groups I-III are all drawn to polynucleotides with different technical features, i.e., different sequence limitations. Groups IV-VI are all drawn to polypeptides with different technical features, i.e., different sequence limitations. Groups VII-XII and XIV-XVI have different technical features by virtue of their methods using products with different technical features as noted above.

Groups I-III do not share a technical feature with Groups IV-VI because polynucleotides and polypeptides do not share the same structure. While these structures may correspond, this point is not valid in the absence of a special technical feature. Groups I-VI do not share a technical feature with the products of Group XIII because polynucleotides and polypeptides are different products than biomolecules, as claimed. While Groups VII-XII and XIV-XVI are drawn to methods of making and/or using the technical feature of Groups I-VI and/or XIII, these method Groups are different in category (methods) than Groups I-VI and XIII (products) and, thus, without sharing a special technical feature, need not be grouped together.

4. Applicant is reminded that U.S. practice with applications filed under 35 U.S.C. § 371 is to restrict on the basis of lack of unity practice, as done above. Moreover, lack of unity is reassessed at each stage of prosecution.

#### ***Election***

5. A telephone call was made to Kate Murashige on March 1, 2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 C.F.R. § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M. Kerr whose telephone number is (571) 272-0931. The examiner can normally be reached on Monday through Friday, from 9:00am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathupura Achutamurthy can be reached on (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kathleen M Kerr  
Primary Examiner  
Art Unit 1652

March 8, 2005